

**“AN OBSERVATIONAL STUDY ON ELECTROCARDIOGRAPHIC
AND ANGIOGRAPHIC CORRELATION IN LOCALISING THE
CULPRIT VESSEL IN ACUTE ST SEGMENT ELEVATION
MYOCARDIAL INFARCTION”**

ABSTRACT

Background:

Myocardial infarction is one of the most common causes of mortality and morbidity in both developed and developing countries. Coronary angiography is not easily available in most of the developing countries where the incidence of myocardial infarction is on the rise. Electrocardiogram can be used to diagnose ST segment elevation myocardial infarction and to identify the occlusion site in the coronary arteries.

Objectives:

To study the electrocardiographic and angiographic correlation in localizing the culprit vessel in acute ST segment elevation myocardial infarction and to analyse established individual electrographic parameters for their sensitivity, specificity, positive predictive value, negative predictive value in predicting the culprit vessel.

Methods:

100 patients with ST segment elevation myocardial infarction underwent both electrocardiography and coronary angiography. Established ECG criteria

for identifying the culprit artery and localising the level of lesion were compared with angiographic localisation which is considered as the gold standard.

Results:

In our study we found that established ECG criteria were able to accurately identify the culprit artery and localise the level of the lesion.

Conclusions:

Electrocardiogram plays an important role in diagnosing and classifying myocardial infarction. Specific electrocardiographic criteria are able to predict the occluded coronary artery and localise the level of occlusion to a statistically significant level, comparable with coronary angiographic results.

Keywords :

- Electrocardiogram
- Angiography
- Localisation
- Myocardial infarction